vestment, recognising the NHS budget (providing free universal healthcare) was not unlimited. Local organisation of disinvestment policy was preferred, though some national co-ordination was felt necessary to retain equity across geographical jurisdictions. Technologies of unproven or negligible clinical benefit, or obsolete technologies were cited as disinvestment priorities. Respondents preferred disinvestment decisions be clinician-led. Other decision-making groups (e.g. patients) were expected to be biased or not sufficiently knowledgeable about the relevant issues. When existing technologies conferred clinical benefits to (even small numbers of) patients, responses suggested loss aversion, even under circumstances of increased risks alongside these benefits. Biases are uncontrolled when using a qualitative methodology to explore these issues. **CONCLUSIONS:** To maximise acceptability to taxpayers, disinvestment policy-making in Scotland should prioritise technologies of comparatively low or unproven benefit. Decisions should be locally-based and clinician-led. Future research on disinvestment should utilise quantitative, preference-elicitation methods to minimise potential biases.

PHP130

USING ECONOMIC EVIDENCE AND STAKEHOLDER'S PARTICIPATION IN DECISION MAKING ON BENEFIT PACKAGE OF PUBLIC HEALTH INSURANCE IN THAILAND

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OBJECTIVES: With the increasing demands for health care from aging society and rapid technological advancement, the National Health Security Office (NHSO) of Thailand demands for the development of systematic, transparent, and participatory processes for selection of new health interventions to be included into the benefit package of universal health coverage (UC) scheme. This study reviews and describes experiences in the development of guidelines for economic evaluation and participatory process of key stakeholders in submission and topic selection of new health interventions into the UC benefit package. Lessons learnt from this initiative are drawn in order to share experiences of Thailand to other developing countries. **METHODS:** Research methods comprise comprehensive literature reviews, focus group discussion, and brainstorming meeting among key stakeholders, working groups, and subcommittee members. **RESULTS:** Research findings indicate that the draft guideline produced by several rounds of stakeholder consultations has been gradually accepted and adjusted by policy makers and key stakeholders. Key features of the guideline comprise a) transparency in topic selection for economic appraisal with full engagement of key stakeholders; b) economic evaluation on selected interventions using incremental cost-effectiveness ratio (ICER); c) budget impact analysis. The ICER threshold of 1 GDP per capita for QALY gained has been applied by the Benefit Package Subcommittee of NHSO. The six criteria for prioritization of topics were adopted in consensus by stakeholder consultations. In Fiscal year 2010 and 2011, this guideline was successfully applied twice a year for topic selection, economic appraisal, and recommendations to the sub-committee and transmitted to NHSO Board for its final decision. **CONCLUSIONS:** This initiative not only produced and applied evidence informed decisions in a transparent manner; it also strengthened and sustained institutional capacities in generating evidence on ICER, budget impact assessment and other ethical social considerations. The NHSO subcommittee is the platform for interchange between evidence and policies.

PHP131

HOW CAN PHARMA INDUSTRY PREPARE ITSELF FOR THE CHANGING PRICING AND REIMBURSEMENT LANDSCAPE OF ORPHAN DRUGS IN EU?

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OBJECTIVES: Healthc are reforms are inherent in any health care system across the globe in order to take into account changes and developments worldwide on new ways to evaluate innovative medicines. This has impacted drugs being launched in the rare disease space. The research is aimed to understand the dynamics in pricing and reimbursement environment of drugs launched in rare diseases in key European markets. **METHODS:** The research involved desk research as well as interviews with selected stakeholders in EU5, The Netherlands, Sweden, Finland and Romania. **RESULTS:** In the past it was orphan drugs were able to achieve a high price or favourable reimbursement status, largely due to International and National OD legislation. The results inferred that factors such as the level of unmet needs, severity of diseases, prevalence, innovation, clinical effectiveness influence the achievable price and reimbursement. To keep up to speed to the challenges of dynamic healthcare funding environments pharmaceutical companies have to ensure that the value of the product is well demonstrated with a clear value proposition. When products are launched in specific markets, the HTA bodies look for specific criteria to be fulfilled (e.g. the SMC in the UK or HAS in France). **CONCLUSIONS:** Orphan drugs are facing significant challenges in the future. However, opportunities still exist for novel compounds to reach the market place and have an impact on how rare diseases are treated. Low patient numbers, high levels of both disease severity and unmet need and public perception can help boost the economic argument for Orphan Drug Approval and enable strong market access.

Health Care Use & Policy Studies – Patient-Registries & Post-Marketing Studies

PHP132

USE OF A DISEASE SPECIFIC QUALITY OF LIFE TOOL IN A QUALITY ASSURANCE SCHEME FOR DAY CASE HERNIA SURGERY

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OBJECTIVES: Outpatient services in Germany are less controlled by external quality assurance programs. Comprehensive outcome data for benchmarking or health-care decision-making are missing e.g. for day case surgery. A quality-of-life instrument specific to hernia repair with mesh has been recently proposed (Carolinas Comfort Scale, CCS). This study evaluates the integration of CCS as part of a multicentre quality assurance scheme for outpatient surgery. **METHODS:** Sixteen ambulant centres developed a web-based quality assurance scheme for hernia day surgery in Germany. In an evaluation phase, all patients which were intended to treat with 3-dimensional meshes, were registered with consensus into a database through a web-based portal. CCS questionnaires were mailed to patients 4 and 12 weeks after surgery. Patients were requested to send pseudonymized responses to an independent party for inputting answers into the database. Clinical examinations were made 4 and 12 weeks postoperatively. Additional follow-up is planned 52 weeks after surgery. CSS consists of 23 questions in 7 activity- categories and 3 dimensions: sensation of mesh, movement limitations, pain. **RESULTS:** During the first year (Oct 2009 to Sept 2010) 1429 patients were registered (1271 male, 158 female, median age 53 years) and treated for primary (88%) or recurrent (11%) hernia. 1300 (90%)/1246 (87%) patients were clinically reviewed 4/12 weeks after surgery. 1072 (75%) /1002 (70%) questionnaires were retrieved 4/12 weeks after surgery. Patient satisfaction rate was 98%. CCS scores are shown to be decreased from 4 to 12 weeks in all dimensions (Sensation: 0.51 to 0.35, Movement: 0.40 to 0.20, pain: 0.45 to 0.26). **CONCLUSIONS:** CCS, a short, hernia-specific quality-of-life questionnaire, is easy to use and well accepted by patients. It is shown to be a feasible instrument to evaluate patient reported outcome after day-case hernia surgery in a web-based multicentre quality assurance system.

Health Care Use & Policy Studies – Population Health

PHP133

LEVELS OF POPULATION RISK STRATIFICATION BASED ON THE COST OF CARE IN PATIENTS WITH CHRONIC DISEASES

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OBJECTIVES: To determine the population risk stratification based on the cost of care (health resource use) in patients with chronic diseases in primary health care (PC). **METHODS:** Multi-center observational design. We included all patients from 6 centers of PC that demanded assistance in 2010 managed by Badalona Serveis Assistencials SA (health organization). The risk population was defined beginning from the complexity (co-morbid chronic [CC]) and fragility (socio-demographic and clinical criteria). Main measures: services (medical, paediatric), chronic co-morbidity (CC) and direct cost model. From a group of experts identified the different chronic conditions and population risk levels: Level 1 (no CC), level 2 (1-2 CC), level 3 (3-4 CC) and level 4 (≥ 5 CC). Fixed (operation) and variable costs were considered. Statistical analysis: linear regression model (coefficient of determination [R2], dependent variable: health care costs) and principal components, $p<0.05$. **RESULTS:** We included 83,090 patients, mean age 40.9 years, women: 53%. The total cost was 56.1 million / EUR. The average / unit cost: 675.3 euros. The cost for drugs was 41%. Stratification levels: level 1 (N = 36,859, 44.4%, €283.9), level 2 (N = 32,644, 39.3%, €694.8), Level 3 (N = 10019, 12.1%, €1461.6, and level 4 (N = 3568, 4.3%, €2331.2). Musculoskeletal diseases (38.1%), mental (31.6%) and cardiovascular (30.4%) were the most frequent, $p<0.001$. Predictive model (R2): age = 23.4%, age-sex = 24.1%, age-sex-CC = 41.8% (medical: 47.9%; Paediatrics: 15.1%, $p<0.001$). It details the complexity and fragility of the patients for each level of stratification and clinical services. **CONCLUSIONS:** The CC is associated with increased healthcare costs. The number of co-morbidities explains much of the costs. Knowledge of the risk / complexity / fragility of the patients should allow preventive intervention strategies.

Health Care Use & Policy Studies – Prescribing Behavior & Treatment Guidelines

PHP134

COMPARISON OF THE KNOWLEDGE IN STANDARD TREATMENT GUIDELINES AMONG MEDICAL PRACTITIONERS AND MEDICAL STUDENTS

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OBJECTIVES: Introduction of module in rational use of medicine (RUM) to pharmacology curriculum needs analysis of existing knowledge among health care workers. The knowledge and attitudes of medical practitioners (MPs) and medical students (MSs) on Standard Treatment Guidelines (STG) were assessed. **METHODS:** Forty-two MPs and 120 MSs were given pretested structured questionnaire on STG and core policies of RUM. **RESULTS:** Results showed that only 78 % of MPs were confident about their knowledge in STG and 7% of them were not attentive. Knowledge of MPs and MSs showed 78% and 84% on contents of STG while the knowledge in core policies was 73% and 34% respectively. More than 99% of MSs and 71% of MPs were attentive on the inclusion of clinical features of the illness in STG. knowledge on updating and significance of STG as guidance for new prescribers of MPs were 84% and 88% respectively while 96 % of MSs had acquainted in those two areas. Both groups had good knowledge on STG is not an accordance with personnel experience (MPs-71%, MSs-74%). 80% of MSs and 75% MPs discerned that common treatment practices is not an inclusion criteria for STG. **CONCLUSIONS:** We found that MSs had good knowledge about the contents of STG and skills in application in RUM are limited. MPs were detailed on core policies & application of STG